IN THE CLAIMS

1. (original) An apparatus, comprising:

a plurality of received-signal registers which receive and store therein a plurality of respective received-signal sequences;

a selector which selects one of the received signal sequences stored in said received-signal registers;

at least one code register which stores therein a de-spreading-code sequence;

a multiplication circuit which multiplies the selected one of the received-signal sequences by the de-spreading-code sequence; and

a summation circuit which obtains a sum of results of the multiplication to obtain a correlation between the selected one of the received-signal sequences and the de-spreading-code sequence.

2. (original) The apparatus as claimed in claim 1, wherein said at least one code register includes a plurality of code registers which store therein a plurality of respective de-spreading-code sequences, and said apparatus further comprising a selector which selects one of said plurality of code registers to select and supply the de-spreading-code sequence to the multiplication circuit.

3. (original) The apparatus as claimed in claim 1, further comprising:

a delay-profile-holding unit which generates a delay profile based on correlations obtained by the summation circuit; and

a path-timing-detection circuit which detect a path timing by detecting a peak of the delay profile.

4. (original) The apparatus as claimed in claim 3, further comprising:

a first sequence-order-control circuit which converts a single received-signal sequence arranged in a first order into k received-signal sequences arranged in a second order where k is more than one, the k received-signal sequences being supplied to said plurality of received-signal registers; and

a second sequence-order-control circuit which converts the delay profile from one corresponding to the second order to one corresponding to the first order.

5. (original) The apparatus as claimed in claim 4, wherein the single received-signal sequence has a spreading factor m and an over-sample ratio that is equal to k, and each of the k received-signal sequences has m samples therein, and wherein each of said plurality of received-signal registers has m stages.

6. (original) The apparatus as claimed in claim 1, further comprising:

N received-signal-holding units which hold therein N received-signal sequences;

a selector which successively selects one of said N received-signal-holding units, and supplies the successively selected one of the N received-signal sequences to said plurality of received-signal registers at a speed N times faster than sampling speed of the N received-signal sequences;

N delay-profile-holding units which generate N delay profiles corresponding to the N received-signal sequences based on correlations obtained by the summation circuit;

a selector which successively selects one of said N delay-profile-holding units, and supplies the successively selected one of the N delay profiles; and

a path-timing-detection circuit which detect a path timing by detecting a peak of the successively selected one of the N delay profiles.

7. (new) An apparatus for obtaining a correlation wherein a correlation calculating unit calculates the correlation while shifting, relative to a de-spreading code, a phase of a received signal spread by a spreading code, comprising:

a first shift register configured to store a first received signal;

a second shift register configured to store a second received signal;

a selector unit configured to selectively output one of the first received signal and the second received signal; and

a control unit configured to cause said selector unit to output the first received signal and to cause the correlation calculating unit to calculate a correlation with respect to the first received signal, followed by causing said selector unit to output the second received signal and by causing the correlation calculating unit to calculate a correlation with respect to the second received signal..

8. (new) The apparatus as claimed in claim 7, wherein said second shift register shifts the second received signal to set the second received signal to a predetermined phase while correlation calculation is being performed for the first received signal.

9. (new) The apparatus as claimed in claim 7, wherein the first received signal is a signal spread by a first spreading code and the second received signal is a signal spread by a second spreading code, said apparatus further comprising a de-spreading code selecting unit configured to select a first de-spreading code corresponding to the first spreading code for correlation calculation of the first received signal, and to select a second de-spreading code corresponding to the second spreading code for correlation calculation of the second received signal.

10. (new) The apparatus as claimed in claim 7, wherein a signal obtained by oversampling a received signal is picked every few samples to generate two or more sequences, and wherein the first received signal is a first one of the two or more sequences and the second received signal is a second one of the two or more sequences, the correlation calculations of the first received signal and the second received signal being preformed by use of a common de-spreading code.